AVIONICS AND GNC

1) Write a python code to use raspberry pi GPIO pins to control a motor using PWM signal. The duty cycle of the PWM signal should be given as input by the user.

2) Create an Arduino simulation on tinkercad which gives information regarding the atmosphere and the rocket orientation. You are free to use any sensors and obtain any data you feel would be useful.

3) Study in detail about the LoRa antenna module and the communication protocols.

Sub - Task

4) Write a python code to transmit data from the on-board raspberry-Pi to the ground station using the LoRa module. The data must be received from the sensors you used in the above task.

5) Design a web page for our team that must have following features:

navbar, background image(of your choice, obviously related to rocketry), must be responsive i.e must look organised on all devices like laptop, smartphone, etc.

Design the Page on Figma first.